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Information Sheet for BatteryShop™ 7.10

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IMPORTANT: QuickTest matrices that pre-date BatteryShop 6.00 and 6.12 will NOT be imported into the new BatteryShop database because the new Advanced Learn Program uses a new matrix format. Analyzers with pre-version 6.0 firmware do not support adapters with new format matrices to Learn/QuickTest batteries as that will result in faulty test results.

Please ensure that Internet Explorer 5.5 or higher is installed on your system prior to installing Cadex BatteryShop

Main Features of BatteryShop Version 7.10 Release

- Support for LiPh chemistry
- Service Report Preview
- QuickSort test allows for quick sorting of batteries: Good, Low, Poor.
- QuickTest results are displayed as verbal messages: Excellent, Good, Marginal and Poor.
- The Learn program allows batteries to be Learned in any order.
- The OhmTest was improved to make it closer to the IEC 60285 standards.
- Graph test results using multiple y-axes in one graph.
- C-Name added to Battery Model database
- Several messages have been simplified. For example, Code 123, Code 124, Code 127 referred to Low Voltage Timeout Zone 1, Zone 2 and Zone3 depending on where the problem occurred. This has been combined into one message 'Low Voltage'.
- Battery Service Reports can be customized.

Batteryshop™ Features	7.1	7.0	6.12	6.0	5.1	5.0	4.1	4.0	3.0	2.0
Firmware 1.1 Compatibility	✓									
LiPh chemistry	✓									
Multi-Y-Axes graphs in one graph	✓									
Firmware 1.0 Compatibility		✓								
Windows XP	✓	✓	✓	✓	✓	✓	✓	✓		
Windows 2000	✓	✓	✓	✓	✓	✓	✓	✓		
Cadex 7000 C-Series	✓	✓								
Cadex 7000 Series	✓	✓	✓	✓	✓	✓	✓	✓		
QuickSort	✓	✓								
Ni Charge Optimization	✓	✓	✓							
Selectable Ni DT/dt Charge Termination	✓	✓	✓							
Improved sensitivity to Neg. Slope Charge Termination	✓	✓	✓							
Firmware 6.12 Compatibility	✓	✓	✓							
Li Charge Optimization	✓	✓	✓	✓						
Additional Custom Report	✓	✓	✓	✓						
Advanced Learn	✓	✓	✓	✓						
Matrix Protection	✓	✓	✓	✓						
Firmware 5.0 Compatibility					✓	✓				
Interface Customization	✓	✓	✓	✓	✓					
Models Update via Web	✓	✓	✓	✓	✓					
Learn program	✓	✓	✓	✓	✓	✓	✓			
Manual C-Code/Matrix transfer	✓	✓	✓	✓	✓	✓	✓			
Minimum required firmware checking	✓	✓	✓	✓	✓	✓	✓			
Analyzer Icon Size option	✓	✓	✓	✓	✓	✓	✓			

Batteryshop™ Features	7.1	7.0	6.12	6.0	5.1	5.0	4.1	4.0	3.0	2.0
Support for standard DYMO LabelWriter Windows' drivers	✓	✓	✓	✓	✓	✓	✓			
Re-position all fields in label "Print Area" at once	✓	✓	✓	✓	✓	✓	✓			
Windows 95B/98/NT4/ME compatibility			✓	✓	✓	✓	✓	✓	✓	✓
Native data engine	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Option to store real-time chart data that is accessible from Service records at a later date	✓	✓	✓	✓	✓	✓	✓	✓		
MS Outlook style user interface	✓	✓	✓	✓	✓	✓	✓	✓		
Quicktest/Learn	✓	✓	✓	✓	✓	✓	✓	✓		
Improved report/label designer; supports any label printers with Windows printer drivers.	✓	✓	✓	✓	✓	✓	✓	✓		
Additional label and report fields for state of health and confidence grade	✓	✓	✓	✓	✓	✓	✓	✓		
Firmware download utility for updating firmware on the Cadex 7000 C-Series and Cadex 7000 Series analyzers. <i>The utility does NOT work with the Cadex 7000</i>	✓	✓	✓	✓	✓	✓	✓	✓		
Multi-language captions (English, French, Spanish, and German)	✓	✓	✓	✓	✓	✓	✓	✓		
Cycle charts for capacity and impedance	✓	✓	✓	✓	✓	✓	✓	✓		
Support a fleet of 200,000 batteries when using the Battery ID feature.	✓	✓	✓	✓	✓	✓	✓	✓		
Daily log is over-written once a week	✓	✓	✓	✓	✓	✓	✓	✓		
Customizable reports that allow the user to print required columns only.	✓	✓	✓	✓	✓	✓	✓	✓		
Daily log is overwritten each day at midnight									✓	✓

Analyzer Requirements

- BatteryShop™ works with the Cadex 7000 C-Series, Cadex 7000 Series, and the Cadex 7000 analyzers.
- C7000 requires version V3.53; use upgrade kit p/n: 92-770-0110.
- Cadex 7000 C-Series requires firmware 1.10
- Cadex 7000 Series requires firmware version 6.12; follow instructions for "Downloading Firmware" in Cadex Firmware Utility Help (Start > Programs > BatteryShop > Cadex Firmware Utility Help).

Recommended Peripherals

- Label Printing: the **Dymo label printer** via the PC serial port (Cadex p/n: 00-004-3037) or via the PC parallel port with the parallel-to-serial converter (Cadex p/n: 00-004-3032) is recommended for use with BatteryShop™. NOTE: The **Dymo SE300 label printer** via the serial port (Cadex p/n: 00-004-3013) can be configured for BatteryShop™ 6.11 as well.
- Report Printing: Any printer with Windows printer drivers. For laser printers, at least 300 x 300 dpi resolution. For ink-jet printers, at least 360 x 360 dpi resolution for ink-jet printers.
- Optional PCI Bar-code Scanner Kit available (p/n: 92-770-0260)

Minimum PC Requirements

BatteryShop supports English, French, Spanish, and German captions only on the European language versions of Windows. For all other language versions of Windows, BatteryShop supports English captions only.

1. Dedicated computer with Windows XP or 2000 Professional (32-bit).

2. 1 GHz or better, 160 MB free hard-drive space; 256 MB RAM for Windows XP or Windows 2000 Professional with one analyzer connected. 512 MB RAM required with more than one analyzer connected.
3. Internet Explorer 5.5 or higher must be pre-installed.
4. COM (serial) port for each battery analyzer, or USB or COM port multiport adapter.
5. Web update requires working Internet connection.
6. 1024x768 resolution with 16-bit color monitor; mouse; keyboard.
7. UPS (uninterruptible power supply) and 2 GB free hard-drive space if you want to collect Real-time data.
8. Cadex 7000 C-Series (firmware 1.10), Cadex 7000 Series (firmware 6.12), or *Cadex 7000* (firmware 3.53) battery analyzer. If your *C7000* firmware version is less than 3.51, contact Cadex for a C7000 firmware upgrade kit.

Frequently Asked Questions on BatteryShop™

(Q) When I try to connect BatteryShop to the Analyzers, no analyzer icon appears on the screen.

(A) Check the following:

- The serial port device in the analyzer should be set to "BatteryShop".
- The COM port that the analyzer is connected to must listed as one of the "Ports to Search For" list under "System Setup" => "Ports Map" in BatteryShop.
- In the Windows COM port settings, the baud rate = 9600, data bits = 8, stop bits = 1, parity = none, and flow control should be "Hardware". In the advanced settings for the serial port, the FIFO Buffer option should be selected
- Use the gray cable provided with the BatteryShop software. A standard printer or serial cable does not work.
- Make sure that the 9-pin end of the cable is connected to the back of the analyzer. Connect the 25 pin or 9pin port to your COM port (NOT the Printer Parallel Port) of your PC.
- Check the COM port settings on your PC. Make sure that you have only 2 COM ports COM1 or COM2, if there is COM3 and COM4, there will be conflict with COM1 and COM2 since the ports use the same interrupts.
- Check for any modems that may use the COM ports and disconnect them – this can cause interference and conflict with the data.
- Setup the software to search for all the COM ports.

(Q) I cannot connect to more than 3 analyzers

(A) This BatteryShop is licensed for a maximum of three licenses. To connect to more analyzers, contact Cadex or your representative for a license upgrade to 4, 8, 16 or 32 analyzers. To check how many licenses you have, go to 'System Setup' -> 'Ports Map'. The number of licenses is on the bottom left.

(Q) With BatteryShop™ connected to the Cadex 7x00 Analyzers, I cannot start services on the analyzer.

(A) Try the following in the order stated:

- Make sure the proper firmware is installed on C7x00 analyzer. See [Analyzer Requirements](#) above.
- In the Windows COM port settings, the baud rate = 9600, data bits = 8, stop bits = 1, parity = none, and flow control should be "Hardware". In the advanced settings for the serial port, the FIFO Buffer option should be selected and default

(Q) The Dymo EL60 printer cannot print ID or service labels from BatteryShop™.

(A) If you are using the parallel-to-serial converter with the Dymo EL60, the parallel port mode must be set to "SPP" in the BIOS of your computer. If you are using the Dymo EL60 with the serial port on your PC, make sure the serial port settings in Windows are as follows:

- Baud Rate: 19200
- Data Bits: 8
- Parity: None
- Stop Bits: 1
- Flow Control: Hardware

(Q) How do I save real-time battery service data to the disk?

(A) Under "System Setup", "Options", make the check box beside "Save Real Time Data" is enabled. To see the data after battery service has completed, go to "Database" then "Reports".

- Set the query type as "View Services"
- Select either to query by battery ID, battery model, or all batteries
- Select the dates when the service(s) ran
- Click "Run"
- Right-click the battery service you want to see and select "Battery Characteristics Graph"

If the service is already in progress or already finished...

- Right-click the appropriate station on the analyzer icon and select "Real Time Chart".
- Select the "Chart" tab

(Q) How do I service many batteries of the same model without having to double-click the battery model repeatedly?

(A) When you first double-click the appropriate battery model, set the Analyze Mode to "Batch". Insert the battery until the service starts on the analyzer then repeat again for the other batteries. Do not insert batteries at the same time because this will confuse BatteryShop™.

(Q) How do I download and upload matrices?

(A) Insert an adapter into a Cadex C7x00 Series analyzer. Right-click on the analyzer station icon where the adapter was inserted. Select C-Code/Matrix Transfer menu option from the context menu to display the C-Code/Matrix Transfer dialog. A C-Code/Matrix Transfer menu option will not appear for C7000 units.

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